AMENDMENTS TO THE SPECIFICATION

Please delete the section heading at page 1, line 1.

Please replace the paragraph beginning at page 1, line 20 with the following rewritten paragraph:

-- For example, ~~there can be mentioned the~~one prior art process is known as the Siemens process. In the Siemens process, a silicon rod having been heated to a silicon deposition temperature by current passage, is disposed in a bell jar, and trichlorosilane ($SiHCl_3$, hereinafter referred to as TCS) or monosilane (SiH_4) together with a reducing gas, such as hydrogen, is brought into contact with the heated silicon rod to thereby ~~perform~~cause the deposition of silicon. --

Please replace the paragraph beginning at page 2, line 23 with the following rewritten paragraph:

-- This reactor is a very excellent apparatus capable of resolving various problems of the conventional Siemens process and capable of continuous production of silicon. However, when a ~~scaleup~~scale-up of the reaction vessel of cylindrical configuration, etc. described in Examples of Japanese Patent Laid-open Publication No. 2002-29726 is preformed as it is with an intent to produce silicon on an industrial scale of hundreds of tons or more per year, the reactivity of raw gas would inevitably drop. Further, fine powder of silicon and by-products such as low-molecular-weight polymers of silane compounds are likely to be generated, thereby tending to invite a decrease of silicon yield. In these respects, an improvement has been demanded. --

Please replace the section heading at page 3, line 13 with the following rewritten heading:

-- ~~DISCLOSURE~~SUMMARY OF THE INVENTION --

Please replace the paragraph beginning at page 3, line 14 with the following rewritten paragraph:

-- The inventors have made extensive and intensive studies with a view toward resolving the above problems. As a result, it has been found that in the above apparatus, the above problems are caused by the configuration in cross-sectional view of the inside face of the tubular vessel. That is, when a ~~scaleup~~scale-up of a reactor wherein the inside face of the tubular vessel has the shape of simple circle, regular polygon or the like in cross-sectional view

is carried out, there would be a space highly apart from the heated inside face of the tubular vessel, thereby inviting problems such as decrease of raw gas reactivity and tendency toward by-product formation. Studies have been conducted on the basis of this finding. As a result, it has been found that all the above problems can be solved by a reaction vessel comprising a vertically extending wall and a space surrounded by the wall wherein the space of the reaction vessel is of slit form in cross-sectional view so as to reduce the distance from the interior of the space ~~highly apart from~~to the wall's surface facing the space~~, namely, shortening~~. In other words, the distance between the wall's surface ~~capable of~~ where silicon deposition occurs and the interior space where raw gas therein ~~hardly contact with~~barely contacts the wall's surface is reduced so as to increase reaction efficiency. The present invention has been completed on the basis of this finding. --

Please replace the paragraph beginning at page 4, line 12 with the following rewritten paragraph:

-- Thus, according to the present invention, there is provided a silicon production reactor comprising a reaction vessel and heating means, said reaction vessel comprising a vertically extending wall and a space surrounded by the wall, said heating means being capable of heating at least a part, including lower end portion, of the wall's surface facing the space to a temperature of not lower than the melting point of silicon~~, said~~. The silicon production reactor ~~being~~is adapted to ~~flow~~receive a raw gas for silicon deposition flowing from an upper part of the space of the reaction vessel toward a lower part thereof, characterized ~~in~~by the fact that the space ~~of~~within the reaction vessel is of slit form in cross-sectional view.

Please replace the paragraphs from page 5, line 2 to page 6, line 8 and replace them with the following rewritten paragraphs:

-- Fig. 1 is a schematic view of portion of a fundamental form of silicon production reactor according to the present invention, which view shows a vertical section of the reactor~~.~~;

Fig. 2 is a schematic view of portion of another fundamental form of silicon production reactor according to the present invention, which view shows a vertical section of the reactor~~.~~;

Fig. 3 is a schematic view of portion of a further fundamental form of silicon production reactor according to the present invention, which view shows a vertical section of the reactor~~.~~;

Fig. 4 is a schematic view of portion of a representative practical form of silicon production reactor according to the present invention, which view shows a vertical section of the reactor~~.~~;

Fig. 5 is a cross-sectional view of a representative space surrounded by a vertically extending wall in a silicon production reactor of the present invention~~.~~;

Fig. 6 is a cross-sectional view of another representative space surrounded by a vertically extending wall in a silicon production reactor of the present invention~~.~~;

Fig. 7 is a cross-sectional view of a further representative space surrounded by a vertically extending wall in a silicon production reactor of the present invention~~.~~;

Fig. 8 is a cross-sectional view of still a further representative space surrounded by a vertically extending wall in a silicon production reactor of the present invention~~.~~; and --

Please delete lines 13-24 on page 6.

Please delete lines 1-11 on page 7.

Please replace the paragraph on page 9, line 9 with the following rewritten paragraph:

-- The effect exerted by the space (4) of the reaction vessel (1) being of slit form in cross-sectional view according to the present invention (Figs. 5 to 9) will be described. As compared with a reactor of identical surface area with respect to portion with which raw gas can be brought into contact wherein the space (4) of the reaction vessel (1) in cross-sectional view has width (SD) and length (LD) equal to each other, for example, is circular, regular polygonal or the like, the reactor wherein the space (4) of the reaction vessel (1) in cross-sectional view is of slit form realizes a reduction of the space highly apart from the heated surface of wall (a) facing the space (4). Thus, in the reactor wherein the space (4) of the reaction vessel (1) in cross-sectional view is of slit form, the probability of contact of raw gas with the wall's surface can be enhanced, so that the reactivity of raw gas can be enhanced. Further, as a result of easing of the contact of raw gas with the surface of wall (a), the temperature of raw gas in the space (4) can be satisfactorily raised as a whole to thereby enable

narrowing a temperature zone in which by-products are likely to be generated. Consequently, an enhancement of silicon yield can be realized. --

Please delete the section heading at page 40, line 21.